



\*\*FILE\*\* ID\*\*SKIPL

J 5

A large grid of musical notes arranged in a 12x12 staff system. The grid consists of 144 individual note heads. The notes are organized into several distinct groups: a top row of SSSSSSSS, a middle row of KKKKKKKK, a vertical column of II, a top row of PPPPPP, a middle row of PP, a vertical column of I, a bottom row of LL, and a bottom row of SS. There are also two diagonal rows of KK and two diagonal rows of PP. The notes are distributed across the 12 staves, with some staves containing multiple notes and others containing none.

SKIF  
VO4-  
Si Ru El Li Le Me Ca

```
1 0001 0 XTITLE 'Perform all modes of line skiping'
2 0002 0 MODULE SKIPL ( IDENT = 'V04-000'
3 0003 0           XBLISS32 [, ADDRESSING_MODE (EXTERNAL = LONG_RELATIVE,
4 0004 0           NONEXTERNAL = LONG_RELATIVE)]
5 0005 0           ) =
6 0006 1 BEGIN
7 0007 1 ****
8 0008 1 ****
9 0009 1 ****
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27 0027 1 *
28 0028 1 *
29 0029 1 ****
30 0030 1 *
31 0031 1 ++
32 0032 1 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
33 0033 1 *
34 0034 1 ABSTRACT: Conditional and unconditional line skipping.
35 0035 1 *
36 0036 1 ENVIRONMENT: Transportable
37 0037 1 *
38 0038 1 AUTHOR: R.W.Friday      CREATION DATE: May, 1978
39 0039 1 *
```

: 41 0040 1 %SBTTL 'Revision History'  
: 42 0041 1 MODIFIED BY:  
: 43 0042 1  
: 44 0043 1 011 KFA00011 Ken Alden 13-Jun-1983  
: 45 0044 1 Counting of lines is no longer performed in USKIPL  
: 46 0045 1 for /down skipping.  
: 47 0046 1  
: 48 0047 1 010 RER00010 Ron Randall 31-May-1983  
: 49 0048 1 Improved algorithm in uskipl that tests for space available  
: 50 0049 1 at end of page before calling newpag by adding hct\_layout term.  
: 51 0050 1  
: 52 0051 1 009 KAD00009 Keith Dawson 22-Mar-1983  
: 53 0052 1 Added support for non-STREAM output (for LN01, VT100) --  
: 54 0053 1 call to macro op\_dev\_write\_output\_line instead of to  
: 55 0054 1 clh (clh\_write\_output).  
: 56 0055 1  
: 57 0056 1 008 REM00008 Ray Marshall 07-Mar-1983  
: 58 0057 1 Global edit of all modules. Updated module names, idents,  
: 59 0058 1 copyright dates. Changed require files to BLISS library.  
: 60 0059 1  
: 61 0060 1 --

```
63 0061 1 %SBTTL 'Module Level Declarations'  
64 0062 1  
65 0063 1 TABLE OF CONTENTS:  
66 0064 1  
67 0065 1 FORWARD ROUTINE  
68 0066 1 cskipl : novalue,  
69 0067 1 uform : novalue,  
70 0068 1 uskipl : novalue;  
71 0069 1  
72 0070 1 INCLUDE FILES:  
73 0071 1  
74 0072 1 LIBRARY 'NXPORT:XPORT'; ! XPORT Library  
75 0073 1 REQUIRE 'REQ:RNODEF'; ! RUNOFF variant definitions  
76 0204 1  
77 U 0205 1 %IF DSRPLUS %THEN  
78 U 0206 1 LIBRARY 'REQ:DPLLIB'; ! DSRPLUS BLISS Library  
79 0207 1 %ELSE  
80 0208 1 LIBRARY 'REQ:DSRLIB'; ! DSR BLISS Library  
81 0209 1 %FI  
82 0210 1  
83 0211 1  
84 0212 1 EXTERNAL REFERENCES:  
85 0213 1  
86 0214 1 EXTERNAL  
87 0215 1 fnct : fnct_definition.  
88 0216 1 fra : fixed_string.  
89 0217 1 gca : gca_definition.  
90 0218 1 hct : hct_definition.  
91 0219 1 phan : phan_definition.  
92 0220 1 tsf : tsf_definition.  
93 0221 1  
94 0222 1 EXTERNAL ROUTINE  
95 0223 1 bwait.  
96 0224 1 clh.  
97 0225 1 fbwait.  
98 0226 1 lstops.  
99 0227 1 newpag.  
100 0228 1 tpfeql.  
101 0229 1 tpr:  
102 0230 1
```

```
: 104 0231 1 XSBTTL 'CSKIPL -- skip requisit number of lines'
105 0232 1 GLOBAL ROUTINE cskipl (lines) : NOVALUE =
106 0233 1
107 0234 1 !++
108 0235 1 FUNCTIONAL DESCRIPTION:
109 0236 1
110 0237 1     Skips lines until either the top of a page is reached
111 0238 1     or the requested number of lines have been skipped.
112 0239 1
113 0240 1 FORMAL PARAMETERS:
114 0241 1
115 0242 1     Lines - Specifies the maximum number of lines to be skipped.
116 0243 1
117 0244 1 IMPLICIT INPUTS:      None
118 0245 1
119 0246 1 IMPLICIT OUTPUTS:    None
120 0247 1
121 0248 1 ROUTINE VALUE:
122 0249 1 COMPLETION CODES:   None
123 0250 1
124 0251 1 SIDE EFFECTS:       None
125 0252 1
126 0253 1 !--
127 0254 2 BEGIN
128 0255 2
129 0256 2 IF .phan_top_page
130 0257 2 THEN
131 0258 2     RETURN;           ! Don't skip lines if at top of page.
132 0259 2
133 0260 2 IF .lines EQ 0
134 0261 2 THEN
135 0262 2     RETURN;           ! Forget trivial requests.
136 0263 2
137 0264 2 IF NOT tpr (.lines + 1)
138 0265 2 THEN
139 0266 2
140 0267 2     Just start a new page if the skipping
141 0268 2     would go over a page boundary.
142 0269 2
143 0270 2     phan_top_page = true
144 0271 2
145 0272 3 BEGIN
146 0273 3
147 0274 3     Initialize output buffer. When CLH gets called FRA is either empty
148 0275 3     or else contains some stuff that appears to the left of the document.
149 0276 3
150 0277 3     fs_init (fra);
151 0278 3
152 0279 3     Attach listing options to line.
153 0280 3
154 0281 3     lstops (lstops_no_iseqn, true);
155 0282 3
156 0283 3
157 0284 3     Write out the blank lines.
158 0285 3
159 0286 3     INCR I FROM 1 TO MIN (.lines, 500) DO
160 0287 4     BEGIN
```

```

: 161      0288 4
: 162      0289 4      IF .fnct_ready NEQ 0
: 163      0290 4      THEN
: 164      0291 4
: 165      0292 4
: 166      0293 4      | Yup, there are footnotes waiting to be output. So, before
: 167      0294 4      | writing a blank line, see if the paper is positioned at
: 168      0295 4      | precisely the position where some footnotes should appear.
: 169      0296 4
: 170      0297 4      IF tpfeql () NEQ 0
: 171      0298 4      THEN
: 172      0299 4
: 173      0300 4      | Yup, we're in the location where some footnotes should go.
: 174      0301 4      | If a blank line were to be put out now, it would be exactly
: 175      0302 4      | where the first line of the waiting footnotes is supposed
: 176      0303 4      | to appear.
: 177      0304 4
: 178      0305 4      | THEREFORE, it's important that the blank line not be
: 179      0306 4      | generated. Instead, the top-of-page indicator is set,
: 180      0307 4      | so that no more blank lines will be generated, and
: 181      0308 4      | so the next line of text will force out some footnotes.
: 182      0309 4
: 183      0310 5      BEGIN
: 184      0311 5      phan_top_page = true;
: 185      0312 5      RETURN;
: 186      0313 4      END;
: 187      0314 4
: 188      0315 4      IF NOT .gca.skip_out
: 189      0316 4      THEN ! If not skipping output, output blank lines only.
: 190      0317 4      op_dev_write_output_line;
: 191      0318 4
: 192      0319 4      phan_lines_tp = .phan_lines_tp + 1;      ! Count lines.
: 193      0320 3      END;
: 194      0321 3
: 195      0322 3
: 196      0323 3      | Now restore the output buffer to an empty state
: 197      0324 3
: 198      0325 4      fs_init (fra)
: 199      0326 2      END;
: 200      0327 2
: 201      0328 1      END;                                ! End of CSKIPL

```

```
.TITLE SKIPL Perform all modes of line skiping
.IDENT \V04-000\
```

```
.EXTRN FNCT, FRA, GCA, HCT
.EXTRN PHAN, TSF, BWAIT
.EXTRN CLH, FBWAIT, LSTOPS
.EXTRN NEWPAG, TPPFQL, TPR
```

```
.PSECT $CODE$,NOWR,,2
```

55 00000000G	EF 003C 00000	MOVAB PHAN, R5	: 0232
54 00000000G	EF 9E 00002	MOVAB FRA, R4	
01	65 E9 00010	BLBC PHAN, 1\$	: 0256

SKIPL  
V04-000

Perform all modes of line skipping  
CSKIPL -- skip requisite number of lines

C 6  
16-Sep-1984 01:47:33  
14-Sep-1984 13:08:09

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[RUNOFF.SR]

Page 6  
1:1 (4)

SKP  
V04

; Routine Size: 152 bytes, Routine Base: \$CODE\$ + 0000

; 202 0329 1

0329 1

i R

```
: 204 0330 1 %SBTTL 'USKIPL -- unconditionally skip n lines'
: 205 0331 1 GLOBAL ROUTINE uskipl (lines) : NOVALUE =
: 206 0332 1 !++
: 207 0333 1 !++ FUNCTIONAL DESCRIPTION:
: 208 0334 1 !+
: 209 0335 1 !+
: 210 0336 1 Skips lines regardless of position on the page. In the event
: 211 0337 1 that there is a pending formfeed, it forces that out also. Note that
: 212 0338 1 the only time a formfeed could be pending is at the top of a page, when
: 213 0339 1 the user had said .NO HEADERS. The routine cskip cannot put out the
: 214 0340 1 formfeed because it skips lines only if they do not occur at the top of
: 215 0341 1 the page. The only other routine that can catch pending formfeeds is
: 216 0342 1 loutl.
: 217 0343 1 !
: 218 0344 1 FORMAL PARAMETERS:
: 219 0345 1 !
: 220 0346 1 lines - Specifies how many lines are to be skipped.
: 221 0347 1 !
: 222 0348 1 IMPLICIT INPUTS: None
: 223 0349 1 !
: 224 0350 1 IMPLICIT OUTPUTS: None
: 225 0351 1 !
: 226 0352 1 ROUTINE VALUE:
: 227 0353 1 COMPLETION CODES: None
: 228 0354 1 !
: 229 0355 1 SIDE EFFECTS: None
: 230 0356 1 !-
: 231 0357 1 !
: 232 0358 2 BEGIN
: 233 0359 2 LOCAL
: 234 0360 2 skip;
: 235 0361 2
: 236 0362 2
: 237 0363 2 IF .lines EQL 0
: 238 0364 2 THEN
: 239 0365 2 RETURN; ! No lines to skip.
: 240 0366 2
: 241 0367 2 skip = .lines;
: 242 0368 2
: 243 0369 2 IF .phan_form_pend NEQ 0
: 244 0370 2 THEN ! If a form feed is pending
: 245 0371 2 IF .phan_simulate
: 246 0372 2 THEN ! and /SIMULATE,
: 247 0373 2 uform ()
: 248 0374 2 ELSE ! and /NOSIMULATE,
: 249 0375 3 BEGIN ! then simulate the formfeed.
: 250 0376 3 IF .phan_pause
: 251 0377 3 THEN ! If a form feed and /NOSIMULATE,
: 252 0378 4 (IF NOT .gca_skip_out ! then force out pending formfeed
: 253 0379 4 THEN
: 254 0380 4 fbwait () ! Bell the user before issuing the <FF>.
: 255 0381 3 ELSE fs_wchar (fra, .phan_form_pend);
: 256 0382 3
: 257 0383 3 lstops (lstops_no_iseqn, true); ! Attach listing options to line.
: 258 0384 3
: 259 0385 3
: 260 0386 3 IF NOT .gca_skip_out
```

```

261      0387 3      THEN
262      0388 3      op_dev_write_output_line;    ! If output is suppressed, then
263      0389 3
264      0390 3      IF NOT .gca_down_flag
265      0391 3      THEN
266      0392 3      phan_lines_tp = .phan_lines_tp + 1;    ! Count lines.
267      0393 3
268      0394 3      skip = .skip - 1;
269      0395 3      phan_form_pend = 0;
270      0396 3      fs_init (fra);
271      0397 2      END;
272      0398 2
273      0399 2      INCR i FROM 1 TO min (.skip, 500) DO
274      0400 3      BEGIN
275      0401 3
276      0402 4      IF .phan.paging AND (.phan_top_page OR
277      0403 6      ((.phan_lines_tp + (IF .hct_layout EQ 0 THEN 0 ELSE 1))
278      0404 4      GEQ .phan_llines))
279      0405 3      THEN
280      0406 3      newpag ();
281      0407 3
282      0408 3      fs_init (fra);
283      0409 3
284      0410 3      lstops (lstops_no_iseqn, true); ! Attach listing options to line.
285      0411 3
286      0412 3      IF NOT .gca_skip_out THEN    ! If output is NOT suppressed,
287      0413 3      op_dev_write_output_line;    ! write out blank lines.
288      0414 3
289      0415 3      IF NOT .gca_down_flag
290      0416 3      THEN
291      0417 3      phan_lines_tp = .phan_lines_tp + 1; ! Count lines if not /down.
292      0418 2
293      0419 2      END;
294      0420 2      fs_init (fra);
295      0421 2      END;                                ! End of USKIPL

```

				.ENTRY	USKIPL, Save R2,R3,R4,R5,R6,R7,R8	: 0331
58	00000000G	01FC	00000	MOVAB	CLH, R8	
57	00000000G	EF	9E 00002	MOVAB	LSTOP\$, R7	
56	00000000G	EF	9E 00009	MOVAB	GCA+112, R6	
55	00000000G	EF	9E 00010	MOVAB	PHAN+12, R5	
54	00000000G	EF	9E 00017	MOVAB	FRA, R4	
		04	AC D5 00025	TSTL	LINES	
			01 12 00028	BNEQ	1\$	
			04 0002A	RET		
52	04	AC	D0 0002B 1\$:	MOVL	LINES, SKIP	: 0367
53	14	A5	D0 0002F	MOVL	PHAN+52, R3	: 0369
			58 13 00033	BEQL	9\$	
00000000V	EF	09	28 A5 E9 00035	BLBC	PHAN+52, 2\$	: 0371
			00 FB 00039	CALLS	#0, UFORM	: 0373
			4B 11 00040	BRB	9\$	
		0C	30 A5 E9 00042 2\$:	BLBC	PHAN+60, 3\$	: 0376
		13	66 E8 00046	BLBS	GCA+112, 4\$	: 0378

Perform all modes of line skipping  
USKIPL -- unconditionally skip n lines

F 6  
16-Sep-1984 01:47:33 VAX-11 Bliss-32 v4.0-742 Page 9  
14-Sep-1984 13:08:09 DISK\$VMSMASTER:[RUNOFF.SRC]SKIPL.BLI;1 (5)

Page 9  
I;1 (5)

SKIPL  
V04-000

Perform all modes of line skipping  
USKIPL -- unconditionally skip n lines

G 6  
16-Sep-1984 01:47:33  
14-Sep-1984 13:08:09

VAX-11 Bliss-32 v4.0-742  
DISK\$VMSMASTER:[RUNOFF.SRC]SKIPL.BLI;1 Page 10  
(5)

; 0421

: Routine Size: 258 bytes, Routine Base: \$CODE\$ + 0098

: 296 0422 1

STC  
V04

```

298 0423 1 %SBTTL 'UFORM -- throw blank lines to top-of-page'
299 0424 1 GLOBAL ROUTINE uform : NOVALUE =
300 0425 1
301 0426 1 !++
302 0427 1 .FUNCTIONAL DESCRIPTION:
303 0428 1
304 0429 1 . Starts a new page by simulating a form feed by
305 0430 1 putting out a sufficient number of blank lines.
306 0431 1
307 0432 1 . FORMAL PARAMETERS: None
308 0433 1
309 0434 1 . IMPLICIT INPUTS: None
310 0435 1
311 0436 1 . IMPLICIT OUTPUTS: None
312 0437 1
313 0438 1 . ROUTINE VALUE:
314 0439 1 . COMPLETION CODES: None
315 0440 1
316 0441 1 . SIDE EFFECTS: None
317 0442 1 --
318 0443 1
319 0444 2 BEGIN
320 0445 2
321 0446 2 LOCAL
322 0447 2   to_end;
323 0448 2
324 0449 2 IF .gca_skip_out
325 0450 2 THEN
326 0451 2   RETURN;
327 0452 2
328 0453 2
329 0454 2 | User said /SIMULATE, so simulate formfeeds.
330 0455 2
331 0456 2
332 0457 2   fs_init (fra);
333 0458 2   to_end = .phan_plines - (.phan_bottom MOD .phan_plines);
334 0459 2
335 0460 2 IF .to_end NEQ .phan_plines
336 0461 2 THEN
337 0462 2   | Skip blank lines only if not already at the end of the page.
338 0463 2
339 0464 2   INCR i FROM 1 TO MIN (.to_end, 500) DO
340 0465 2     op_dev_write_output_line;
341 0466 2
342 0467 2   phan_form_pend = 0;           ! No more pending formfeed.
343 0468 2
344 0469 2
345 0470 2   | Buzz the user if he said /PAUSE.
346 0471 2
347 0472 2   IF .phan_pause
348 0473 2 THEN
349 0474 2     bwait ();
350 0475 2
351 0476 1 END;                      ! End of UFORM

```

			003C 00000	.ENTRY UFORM Save R2,R3,R4,R5	: 0424
			55 00000000G EF 9E 00002	MOVAB PHAN+8, R5	:
			54 00000000G EF 9E 00009	MOVAB FRA, R4	: 0449
			61 00000000G EF E8 00010	BLBS GCA+112, 7\$	: 0456
			OC A4 D4 00017	CLRL FRA+12	:
		04	64 10 A4 9E 0001A	MOVAB FRA+16, FRA	: 0457
	7E	00	51 64 D0 0001F	MOVL FRA, FRA+4	:
	50	30	A5 01 7A 00025	MOVL PHAN+8, R1	:
	50	50	8E 51 7B 0002B	EMUL #1, PHAN+56, #0, -(SP)	: 0459
			51 50 C3 00030	EDIV R1, (SP)+ R0, R0	:
			51 50 D1 00034	SUBL3 R0, R1, TO-END	:
			31 50 13 00037	CMPL TO-END, R1	: 0464
			53 50 D0 00039	BEQL 6\$	:
		000001F4	8F 53 D1 0003C	MOVL TO-END, R3	:
			05 53 15 00043	CMPL R3, #500	:
			53 8F 3C 00045	BLEQ 1\$	:
			53 52 D4 0004A 1\$:	MOVZWL #500, R3	:
			18 52 11 0004C 2\$:	CLRL I	:
	02	00000000G	EF 04 ED 0004E 2\$:	BRB 5\$	:
			04 04 14 00057	CMPZV #4, #4, GCA+208, #2	:
			06 04 DD 00059	BGTR 3\$	:
			02 06 11 0005B	PUSHL #6	:
			08 02 11 0005D 3\$:	BRB 4\$	:
	E4	00000000G	EF 01 FB 0005F 4\$:	PUSHL #11	:
			52 01 F3 00066 5\$:	CALLS #1, CLH	: 0467
			18 53 D4 0006A 6\$:	AOBLEQ R3, I 2\$	: 0472
		07	34 A5 E9 0006D	CLRL PHAN+32	: 0474
		00000000G	EF 00 FB 00071	BLBC PHAN+60, 7\$	: 0476
			04 00 FB 00078 7\$:	CALLS #0, BWAIT	:
				RET	:

; Routine Size: 121 bytes, Routine Base: \$CODE\$ + 019A

```
352 0477 1
353 0478 1 END
354 0479 0 ELUDOM
```

! End of module

## PSECT SUMMARY

Name	Bytes	Attributes
\$CODE\$	531	NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

## Library Statistics

----- Symbols -----	Pages	Processing
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SKIPL  
V04-000

Perform all modes of line skiping  
UFORM -- throw blank lines to top-of-page

J 6  
16-Sep-1984 01:47:33  
14-Sep-1984 13:08:09

VAX-11 Bliss-32 v4.0-742  
DISK\$VMSMASTER:[RUNOFF.SRC]SKIPL.BLI;1

Page 13  
(6)

STC  
V04

: File

	Total	Loaded	Percent	Mapped	Time
\$255\$DUA28:[SYSLIB]XPORT.L32;1	590	0	0	252	00:00.1
\$255\$DUA28:[RUNOFF.SRC]DSRLIB.L32;1	1248	38	3	86	00:00.3

#### COMMAND QUALIFIERS

: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS:SKIPL/OBJ=OBJ\$:SKIPL MSRC\$:SKIPL/UPDATE=(ENHS:SKIPL)

: Size: 531 code + 0 data bytes  
: Run Time: 00:10.0  
: Elapsed Time: 00:28.0  
: Lines/CPU Min: 2888  
: Lexemes/CPU-Min: 19706  
: Memory Used: 78 pages  
: Compilation Complete

0349 AH-BT13A-SE  
VAX/VMS V4.0

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